

Appl. No. 09/910,604
Reply to Office Action of March 14, 2006

REMARKS

As requested by Examiner, the Title has been amended to "SOLID-STATE IMAGE APPARATUS INCLUDING A PLURALITY OF HORIZONTAL TRANSFER REGISTERS FOR TRANSFERRING IMAGE SIGNALS FROM AN IMAGING AREA."

Claim 9 has been added in order to alternately define the invention.

Applicants respectfully request reconsideration of Examiner's rejection of claims 1, 2, and 5 -7 under 35 U.S.C. §102(b). Examiner has rejected these claims in view of the cited prior art reference of *Ueda et al.* (U.S. Patent No. 4,837,630). *Ueda* is directed to an image pickup device including an intermediate storage area including first and second vertical transfer registers for each column of the imaging array. A switch arrangement selectively transfers the charges from the image pickup section to either of the first and second vertical transfer registers disposed for each column. During a vertical blanking period, picture element signals corresponding to odd lines are read out from the image pickup section and are transferred to the first vertical transfer register in the storage region, and then picture element signals corresponding to even lines are read out from the image pickup section and are transferred to the second vertical transfer register in the storage region. During a horizontal blanking period after the vertical blanking period, the readout section independently reads out the picture element signals from the first and second vertical transfer registers in the storage section.

Applicant's invention, on the other hand, does not include an intermediate storage section 14 between the image area 10 of *Ueda*, and the horizontal transfer registers 17/18 of

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Ueda. Furthermore, Applicant's invention does not require that the odd pixels be read out first, followed by the even pixels, as required in the *Ueda* reference. Rather, as shown in Figure 1 of Applicant's disclosure, pixel data in image area A can be directly transferred to the first horizontal transfer register 14A without passing through any additional intermediate vertical transfer section. As a result, the overall size of the device can be further reduced, and vertical-line noise can be reduced and the simplicity of the signal processing system can be increased (See page 17 of Applicant's disclosure).

The *Ueda* reference fails to teach or suggest such a device. In light of the foregoing, Applicants submit that the Examiner must withdraw the 35 U.S.C. §102(b) rejection, and place claims 1, 2, 5, and 6 in condition for allowance.

Applicants respectfully request reconsideration of Examiner's rejection of claim 7 under 35 U.S.C. §103(a). Examiner has rejected these claims in view of the cited prior art reference of *Ueda et al.* (U.S. Patent No. 4,837,630). Applicants submit that, for at least the reasons cited above, claim 7 is also in condition for allowance.

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In light of the foregoing, Applicants respectfully submit that all claims now stand in condition for allowance.

The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 20-1495.

Respectfully submitted,

Date: 6/7/06


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